

19981002.qrp v01_n232.qrs.981002

Date: Fri, 2 Oct 1998 19:03:09 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1232

QRP-L Digest 1232

Topics covered in this issue include:

- 1) [21323] Amorphous panel repair?
by bob evinger <revinger@marshallonline.com>
- 2) [21324] Re: How to safely sell stuff...
by Jim Lowman <jmlowman@ix.netcom.com>
- 3) [21325] RE: Date? Rochester, NH Hosstraders swap meet
by Steven Weber <kd1jv@moose.ncia.net>
- 4) [21326] Juno trouble-change of address
by ka7you@juno.com
- 5) [21327] RE: Battery Questions
by Denton Bramwell W7DB <Denton@Bramwell.Org>
- 6) [21328] PCB drills, etc.
by Mighty Mik <mitymik@hooked.net>
- 7) [21329] Loop Antennas, Dx and qrp
by Thom <thom@li.net>
- 8) [21330] Re: Loop Antennas, Dx and qrp
by wd3p@juno.com (Larry Cahoon)
- 9) [21331] ATTN WB6LMA
by RangerSF5@aol.com
- 10) [21332] Re: Juno trouble-change of address
by we6w@juno.com (Ed Loranger)
- 11) [21333] Re: ATTN WB6LMA
by we6w@juno.com (Ed Loranger)
- 12) [21334] HW-9 Filters Sent
by Denton Bramwell W7DB <Denton@Bramwell.Org>
- 13) [21335] 6m & vhf
by larry.kosch@toltbbs.com
- 14) [21336] Re: PCB drills, etc.
by applitech@mcg.net (Claton Cadmus)
- 15) [21337] re: noise bridge xfmr
by "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>
- 16) [21338] FS: NorCal 40A
by "Tim Cook" <timcook@erinet.com>
- 17) [21339] Info about EPS-1
by "Luke Enriquez" <lenr1@students.latrobe.edu.au>
- 18) [21340] ARCI Fall QSO Party
by camqrp@cyberg8t.com (Cam Hartford)
- 19) [21341] Re: Astron RS-35A Schematic

- by Bob Hightower <ki7mn@extremezone.com>
- 20) [21342] Re: Loop Antennas, Dx and qrp
by "Bruce Prior" <n7rr@hotmail.com>
- 21) [21343] NEED AN EXTERMINATION TEAM
by ARDUJENSKI@aol.com
- 22) [21344] Re: NEED AN EXTERMINATION TEAM
by hsilver@pyx.net
- 23) [21345] Re: PCB drills, etc.
by "Radman" <radman@best.com>
- 24) [21346] MFJ 9040
by kd4pvm@juno.com (Paul W Bridgeman)
- 25) [21347] Mizuho and Nishi Exporter
by Masayuki Uchida <muchida@postman.riken.go.jp>
- 26) [21348] @@@*** Norcal 20 Status Update ***@@@
by Dave Fifield <fifield@pacbell.net>
- 27) [21349] Auction HW9 etc. More info
by Dick G0BPS <Dick@kanga.demon.co.uk>
- 28) [21350] JOTA
by mikemo@ibm.net
- 29) [21351] Re: NEED AN EXTERMINATION TEAM
by "W. Kimura" <w.kimura@valley.net>
- 30) [21352] Re: NEED AN EXTERMINATION TEAM
by Wayne Alexander <walexan@ipa.net>
- 31) [21353] Re: Well, now, this is just ky00t. :)
by DNT1@chrysler.com
- 32) [21354] Oscilloscopes, redux
by Wb4jjjj@aol.com
- 33) [21355] Re: NEED AN EXTERMINATION TEAM
by Wayne Alexander <walexan@ipa.net>
- 34) [21356] FOX: Overview of the 1998/9 QRP-L Foxhunt
by "Paul R. Valko" <prvalko@oakland.edu>
- 35) [21357] FOX: OFFICIAL FOXHUNT RULES AND SCHEDULE v2.0 (fwd)
by "Paul R. Valko" <prvalko@oakland.edu>
- 36) [21358] Bugs mating call
by ac5ez@webtv.net (Larry B)
- 37) [21359] Re: PCB drills, stone age
by mikerice@abtcorp.com (Mike Rice)
- 38) [21360] loops
by David Heintzleman <bchurch@megavision.com>
- 39) [21361] PCB Drilling
by wgabriel@dukeengineering.com
- 40) [21362] caps and values
by Scott Howell <whowell@hq.nasa.gov>
- 41) [21363] Re: HW-9 manual help
by Chris Cartwright <ccart@dns.vidtel.com>
- 42) [21364] Drill sizes?
by James Skalski <jskalski@buffnet.net>
- 43) [21365] Re: JOTA

- by Brian Mileschosky <n5zgt@swcp.com>
- 44) [21366] Trade Sovereign XS for gear
by James Skalski <jskalski@buffnet.net>
- 45) [21367] Re: JOTA
by Paul Harden <pharden@aoc.nrao.edu>
- 46) [21368] Re: HW-9 manual help
by Chris Cartwright <ccart@dns.vidtel.com>
- 47) [21369] Re: Drill sizes?
by wgabriel@dukeengineering.com
- 48) [21370] Re: PCB drills, stone age
by "Brad Hernlem" <alihernlem@hotmail.com>
- 49) [21371] Return Loss Bridge Core
by Pierre Constantineau <pierre@cmpe.ubc.ca>
- 50) [21372] Maybe QRP/ Maybe Not!
by DENNISMO@aol.com
- 51) [21373] Re: Bugs mating call
by Paula Bailey <pmbail01@ox.slug.louisville.edu>
- 52) [21374] Belton - last call
by Ed Manuel <n5em@flash.net> (by way of Ed Manuel <n5em@flash.net>)
- 53) [21375] QRP-level Power Meter
by "Allan (Grant) Taylor" <k7gt@qsl.net>
- 54) [21376] Web sites
by "Frank G3YCC" <g3ycc@g3ycc.prestel.co.uk>
- 55) [21377] October Meeting of Minnesota QRP Society
by applitech@mcg.net (Claton Cadmus)
- 56) [21378] 40 LAST NITE
by "Edward A Kwik jr" <eakwikjr@hti.com>
- 57) [21379] QRP Featured at Palo Alto ARA Meeting Oct 2
by Terry Conboy <terry.conboy@airtouch.com>
- 58) [21380] Free advice
by Martin Squicciarini <MSquicciarini@McGettigan.com>
- 59) [21381] Re: QRP-level Power Meter
by "Radman" <radman@best.com>
- 60) [21382] Cheaper PC Board Drill
by Wes Spence <ac5k@ih2000.net>
- 61) [21383] Loop antenna feed
by Wes Spence <ac5k@ih2000.net>
- 62) [21384] RE: PCB Drilling (LONG)
by gsurrency@juno.com (Gary L Surrency)
- 63) [21385] Re: Bugs mating call
by Vic Rosenthal <rakefet@rakefet.com>
- 64) [21386] Re: PCB Drilling (LONG)
by n5inz@juno.com (John M Andrews)
- 65) [21387] Update: NC20 10-Turn Pot Group Buy
by "Jerry McCollom W0MC" <w0mc@hotmail.com>
- 66) [21388] Loops
by wd3p@juno.com (Larry Cahoon)
- 67) [21389] ARRL Radio Designer Info Needed for Common Solid Stae Devices use

d in QRP projects
by Sam Billingsley <SBillingsley@usaninc.com>
68) [21390] Re: Drill sizes?
by W7LS <w7ls@blarg.net>
69) [21391] TS 50s to QRP Levels
by wd3p@juno.com (Larry Cahoon)

Date: Thu, 1 Oct 1998 18:14:13 -0500 (EST)
From: bob evinger <revinger@marshallonline.com>
To: qrp-l@Lehigh.EDU, wvara@qrp.com
Subject: [21323] Amorphous panel repair?
Message-ID: <Pine.LNX.3.96.981001180828.771C-1000000@wd9eka>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I bought a 5 watt amorphous panel at the Peoria Hamfest. Before I had a chance to make a frame for it I have had one of the leads come off and wonder if anybody has dealt with this kind of situation before.

A flea market vendor had a stack of these, it looks like he set them up himself. The leads were soldered to copperfoil tape that appear to be adhesively attached to the appropriate location. Had I looked at it closer and seen the method I wouldnt have bought it. Anyway, the back of the panel is conductive, almost mirror like appearance but due to the nature of the beast it doesnt want to take solder and I am afraid of damaging it if I crank the heat up too high.

My only idea that provides a solid contact is to use conductive epoxy. But the stuff is \$16.00 for a very small tube and I dont want to buy it only to find out that it wont work.

Anyone used conductive epoxy? If so how well did it work. I believe this stuff may be used for surface mount. Is it possible to bury a copy wire in the epoxy and have it be an acceptable electrical connection???

Any ideas would be greatly appreciated. Hate to throw \$30 dollars out the window but I need a good weather tight connection scheme.

thanks/72

bob

Bob Evinger | 19250 N. Livingston Road | revinger@marshallonline.com

WD9EKA | Marshall, IL 62441 |

Date: Thu, 01 Oct 1998 16:44:58 -0700
From: Jim Lowman <jmlowman@ix.netcom.com>
To: mwattcpa@earthlink.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21324] Re: How to safely sell stuff...
Message-ID: <361413FA.5A5D560B@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Marty Watt wrote:

>
> On Wed, 30 Sep 98 12:44:33 , "Caitlyn M. Martin" <cait.martin@ibm.net> wrote:
>
> >Well, guess what? I wouldn't sell to either of you, and I make no bones
> >about it. Why? Have you ever waited a year to finally collect on a
> >bounced check?
>
> What would you do at a hamfest?

I've always assumed that personal checks weren't accepted at hamfests.
On the
occasions that I didn't have enough cash - and I usually hit the ATM in
anticipation that there might be something worth spending a few hundred
on -
a friend loaned me the money, and I wrote *him* a check when we got back
to
my car.

This may vary, depending on one's location. YMMV. I'm used to places
being
reluctant to accept a personal check, but noticed that the reluctance
decreased
upon travelling away from southern California.

> The time required for me to take off work, drive to the Post Office (my
> nearest post office doesn't sell money orders -- it's inside a grocery store),
> wait in line, drive back to work -- that's an hour of my time. Depending on
> one's income, potentially a substantial amount of cash. I used to be a
> consultant, and charged my time at \$275 per hour. The loss of one hour is
> pretty substantial.

Guess I'm lucky; there's a post office just two blocks from my office.
If I
think that one will be busy, there's one that does so little business
that I'm
surprised that USPS keeps it open, just 10 minutes away. Never a wait
there.

> Business transactions involve inherent risk. If I'm at a bank, and hand the
> teller my check, there is a risk they won't give me cash in return. I had a
> bank lose a deposit. Even with a receipt, they wanted ME to locate their lost
> money. Try to correct THAT one in seven days. (It ain't fun, let me tell you)
> If you can't handle the risk, then don't do business.

The other risk at hamfests and swapmeets is that the equipment being
sold is less
than represented, electronically. I suppose that it becomes a matter of
mutual risk
for both buyer and seller.

72 de Jim - AD6CW

Date: Thu, 01 Oct 1998 19:12:08
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@Lehigh.EDU
Subject: [21325] RE: Date? Rochester, NH Hosstraders swap meet
Message-ID: <3.0.3.16.19981001191208.221fc9b6@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks to all that conferred the Rochester NH swap meet is Oct 9th and 10th.

I always try to make it in the fall, and loose track of the date. If you've
never been there, lots and lots of people and stuff. A bit hard to find if
you take the wrong exit, and I've only found the right one once!

They let you camp over night for free and only costs \$5.00 to get in if you
show up after 4 PM or so on Friday, otherwise it's \$20.

Hope to run into some of you there.

72, Steve, KD1JV

Date: Thu, 1 Oct 1998 17:16:36 -0700
From: ka7you@juno.com
To: QRP-L@Lehigh.EDU
Cc: KA7YOU@aol.com
Subject: [21326] Juno trouble-change of address
Message-ID: <19981001.171641.6902.0.KA7YOU@juno.com>

I've been loosing whole days worth of downloads recently, and can't seem to access my older files.

The program seems to be downloading but then when it processes the files, they just go away, and the computer locks up with a "Serious error writing to Drive C" message..

How do I change my address on QRP-L to the AOL account. I can subscribe that way and then unsubscribe to the Juno address, but I'm not sure that is the correct way to make the change.

Juno works fine on my laptop, which I'm presently using, and every other program works OK on the desktop, so I must have corrupted my Juno software on the desktop computer somehow.

Anyonw who has sent me mail recently might try again. I will be using the laptop for a few days while I get this sorted out.

Rod Johnson KA7YOU CN97AK 160M thru 1296MHz
NWQRP #120 ARCI-QRP#7251 QRP-L#844

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Date: Thu, 1 Oct 1998 18:22:12 +0100
From: Denton Bramwell W7DB <Denton@Bramwell.Org>
To: "'qrp-l@lehigh.edu'" <qrp-l@Lehigh.EDU>
Subject: [21327] RE: Battery Questions
Message-ID: <5103124387F8D11199DD00A0C925E4B9169A@SQLMAILSERVER>
MIME-Version: 1.0
Content-Type: text/plain

"7 Amp Hours" is reasonably close to being a true statement, over a reasonable range of currents. You could indeed draw 7 amps for an hour, or .1 amps for 70 hours. You could not draw 70 amps for .1 hour.

Every battery has an internal resistance. A 1,000 CCA car battery will have an internal resistance of about 3 milliohms. A 9 volt transistor

battery has a resistance of a few tens of ohms. The internal resistance will limit how much current you can draw, and remain at a reasonable terminal voltage.

Further, the electrolyte in a gel cell is not as mobile as in a liquid cell battery. If you draw a lot of current, it will deplete some regions of the electrolyte, and the battery will exhibit higher internal resistance for a time.

As a benchmark, I can run my 20 watt SG-2020 (which is not sparing on receive current) for a couple of hours on a 4 AH NiCd pack, or practically all afternoon on a 7 AH pack.

I wouldn't expect a 7 AH gel cell battery to hold up well at buffering a 100 watt rig.

-----Original Message-----

From: Brad Mugleston [mailto:bmug@gwl.com]

Sent: Thursday, October 01, 1998 11:12 AM

To: Low Power Amateur Radio Discussion

Subject: Battery Questions

I'll repeat what others have said, I know this has been discussed before but I was asleep.

I was wondering, I have a nice gel cell (12V 7AmpHrs). What does this mean.

Can I draw 1 amp from it for 7 hours, Can I draw 7 amp per hour from it (if so for how long). Can I get 20 amp from it for 20 minutes?

I'm now asking this as I have my first rig capable of QRO and was wondering what my batteries could handle or do with this rig IF I go nuts and try over 5 watts.

Thanks

de KB0ROL, Brad

Date: Thu, 01 Oct 1998 17:50:36 -0700

From: Mighty Mik <mitymik@hooked.net>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [21328] PCB drills, etc.
Message-ID: <3614235B.4A6FC1F5@wenet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Welll...up untill the time it was STOLEN...i used the \$55 cheapie from Harbor Freight...keyless chuck , and will be at home on a table top.

<http://www.harborfreight.com>

Date: Thu, 1 Oct 1998 20:57:08 -0400 (EDT)
From: Thom <thom@li.net>
To: "qrp-1@lehigh.edu" <qrp-1@Lehigh.EDU>
Cc: liqrp <liqrp@waterw.com>
Subject: [21329] Loop Antennas, Dx and qrp
Message-ID: <Pine.SUN.3.95.981001204748.18821A-100000@linet01>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

I had read the article by WA2UGT in the September issue of 73 Magazine about horizontal loop antennas thought it might be time to help my 5 watts out a bit. The article compared, with favorable results an 80 meter square loop to other antennas.

Real Estate being what is here on Long Island, I would probably have to settle for a 40 meter loop (abot 140 feet in total).

After reading the article I dusted off my copy of "W1FB's Antebba Notebook". Doug indicates that a horozontal square is very good for short (up to 600 miles or so) range but in his words it is "less than spectatular for DX". He goes on to say that a verticlly mounted triangle loop would be better. Well Doug DeMaw is (still) the master, so I'm inclined to go with what he says. The problem is that I'd need to get up about 50 feet or so at the apex of the triangle, and that could be problem.

If anyone has any suggestions ot experience I'd be happy to hear from you. I'm not intp DX per se, I guess I wouldn't mind jumping the pond

once in a while.

Thanks for any info you may provide
73/72
Tom McCulloch
WB2QDG
thom@li.net

Date: Fri, 2 Oct 1998 01:20:19 +0100
From: wd3p@juno.com (Larry Cahoon)
To: thom@li.net, qrp-1@Lehigh.EDU
Subject: [21330] Re: Loop Antennas, Dx and qrp
Message-ID: <19981002.012020.4006.0.wd3p@juno.com>

On Thu, 1 Oct 1998 20:57:08 -0400 (EDT) Thom <thom@li.net> writes:
>

>Magazine
>about horizontal loop antennas thought it might be time to help my 5
>watts out a bit.

After a talk last year on ant and a sails job on the value of the horizontal loop. I tried one out. Used about 1500+ feet of electric fence wire run though the woods in a big lopsided loop. Elevation was 8 to 15 feet depending on the tree limbs available. Fed it with ladder line to a balanced tuner.

It lasted about two weeks before I gave up. In general my simple dipoles were always just as good and frequently had a two s-unit advantage on receive. I didn't find any situation where I preferred the loop. Tried it out mostly on 20 and 40 meters. Never did any real testing on transmit.

If you are going to try one out don't go with the electric fence wire, it breaks too easily, but I figured it was cheap and if it didn't work I wasn't out very much cash.

The thing did work and if I was real short of supports for a real dipole or a place for a good vertical I might give it a try. But it is now way down on my list of preferred ant.

Has anyone had a better experience?????

I do have a friend who loved his vertical loop for 40 and 80 meters.

Great for cutting thorough the noise on those bands. Rather than a triangle he use a square.

73 de Larry.....WD3P

WAS with a total power of 21.89 Watts

Worked all US Counties with an average power of 55 Watts and fallling.....

You don't need to buy Internet access to use free Internet e-mail.
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Or call Juno at (800) 654-JUNO [654-5866]

Date: Thu, 1 Oct 1998 21:44:48 EDT
From: RangerSF5@aol.com
To: qrp-1@Lehigh.EDU
Subject: [21331] ATTN WB6LMA
Message-ID: <fa5385f3.36143010@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Anyone have an *E* mail for this person?

He sent me a qrp rig but it took so long before I received it,I can't remember if it was a trade or a sale.

I hate to send it back as I want the rig but I had several sell and swap deals going.

He saw my post on the list so he has an *E* mail but I lost it.

I'll keep it for a week.

If he doesn't contact me then I'll have to ship it back.

Bob

WA2HOQ

Date: Thu, 01 Oct 1998 21:51:11 EDT
From: we6w@juno.com (Ed Loranger)
To: ka7you@juno.com
Cc: qrp-1@Lehigh.EDU
Subject: [21332] Re: Juno trouble-change of address
Message-ID: <19981001.184440.8071.8.we6w@juno.com>

I know exactly what you are going thru!! Rod, you

need more memory available. Shut down every non-essential application and it will work. I went from 4 MB to 8 Mb and everything is excellent now. Heck, I even went thru a period when juno was busy my computer would FREEZE! All folders would be gone upon reboot. But actually, all the folders are named FILE1, file2 etc. and there is a master lookup table. Just import files under features or options and you will recover the lost information. Mail waiting to be sent seems to be lost forever... Unless you quit and restart juno before sending.

Ads? what ads..... What .bat file :)

72, Ed WE6W QRP-Z#106 <http://www.qsl.net/we6w>
Enjoying Ham Radio every day! Santa Rosa, CA.

On Thu, 1 Oct 1998 17:16:36 -0700 ka7you@juno.com writes:
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You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Thu, 01 Oct 1998 22:12:28 EDT
From: we6w@juno.com (Ed Loranger)
To: RangerSF5@aol.com
Cc: qrp-l@Lehigh.EDU
Subject: [21333] Re: ATTN WB6LMA
Message-ID: <19981001.190554.8071.17.we6w@juno.com>

Bob, email <mailto:listserv@lehigh.edu>
NO SUBJECT
Body:
RUN QRP-L X CALLS2DIST call1 call2

You could use the FCC Call command but this
one covers everything (Including Bearing for theFox hunts!)

EXAMPLE
RUN QRP-L X CALLS2DIST we6w WB6LMA

will return all information, including email, if any.
And QRP-1 number too!

Enjoy.

Darn. I've given away the "Vibro-Fox Finders" number
1 secret...

-Ed

72, Ed WE6W QRP-Z#106 <http://www.qsl.net/we6w>
Enjoying Ham Radio every day! Santa Rosa, CA.

On Thu, 1 Oct 1998 21:44:48 EDT RangerSF5@aol.com writes:

>Anyone have an *E* mail for this person?
>He sent me a qrp rig but it took so long before I received it,I can't
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>I hate to send it back as I want the rig but I had several sell and
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>He saw my post on the list so he has an *E* mail but I lost it.
>I'll keep it for a week.
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>Bob
>WA2HOQ
>
>

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Date: Thu, 1 Oct 1998 20:28:24 +0100

From: Denton Bramwell W7DB <Denton@Bramwell.Org>

To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>

Subject: [21334] HW-9 Filters Sent

Message-ID: <5103124387F8D11199DD00A0C925E4B9169D@SQLMAILSERVER>

MIME-Version: 1.0

Content-Type: text/plain

The HW-9 filter mod kits are packed up and ready to send tomorrow. As
far as I know, this exhausts the world's supply of these.

Date: Thu, 01 Oct 98 22:34:42 -0500
From: larry.kosch@tolttbbs.com
To: qrp-l@Lehigh.EDU
Subject: [21335] 6m & vhf
Message-ID: <9810012234.0VPVR03@tolttbbs.com>

Hi Gang

Looking for address of a 6 meter or vhf e-mail bulletin board...
Have been giving 6m fm a try and would like and get into a
bbs for some info...Thanks for any help...Larry...K8EJU...

QRP-L 364 ARCI-8012 NORCAL-939 MICH-994 LARRY-K8EJU MAUMEE,OH

larry.kosch@tolttbbs.com

Date: Thu, 1 Oct 1998 21:25:23 -0500
From: applitech@mcg.net (Claton Cadmus)
To: <gsurrency@juno.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [21336] Re: PCB drills, etc.
Message-ID: <00a801bdedad\$530fa020\$a10a5e2c@groucho>

What I do is chuck the bit in a pin vise and chuck that in my drill press. I pin vise is a small chuck that's supposed to be used with small drills and turned with the fingers to hand drill holes. Doing it by hand works too, but takes a long time for a board with a lot of holes. They should be available at your hardware or local Sears store. The one I have is quite old and is double ended and I remove the end I'm not using so it has a straight shank. The one you find may have a knob, you will need to remove the knob or otherwise modify it so it can be chucked in the drill press.

Another trick I use is to mount or clamp a scrap of pine or plywood with a good surface to the bed of the drill press. Then I drill a hole with the smallest bit I'm going to use in the wood. This makes a receiving hole for the bit and really helps prevent drill breakage. I drill all the smallest holes first and move up though the larger sizes. Nevertheless, buy your drills a few at a time. I have used carbide drills too, and although they will drill more holes before getting dull, they are more brittle and tend to break sooner. I've settled on regular twist bits. Run the drill at

medium speed and drill slow, let the drill do the work, don't force it or rush and the bits will last quite awhile.

Hope this helps.

73 de KA0GKC Claton Cadmus

cla@mcg.net

MNQRP #1

Minnesota QRP'ers we're looking for you!

Email me or visit this page <http://www.qsl.net/mnqrp>

Date: Fri, 02 Oct 1998 02:37:33 -0400

From: "Rich Dailey, KA8OKH" <ka8okh@som-uky.campus.mci.net>

To: qrp-1@Lehigh.EDU

Subject: [21337] re: noise bridge xfmr

Message-ID: <3.0.16.19981002023652.0897e47e@som-uky.campus.mci.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Many answers. Thanks to all who responded. The overwhelming response was that they use a toroid.

Rich - a.k.a. The Lone Kentucky Foxhunter

Date: Thu, 1 Oct 1998 23:05:58 -0400

From: "Tim Cook" <timcook@erinet.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [21338] FS: NorCal 40A

Message-ID: <009501bdebd1\$94f7bd20\$9d7f5acf@timcook.erinet.com>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

For Sale Wilderness NorCal 40A. Very nice condition. This is the unit built by Rich Arland K7SZ and featured in the June 1996 QST article on low power radios. Since that article he added a small swr meter to the front panel (very nicely done I might add) and removed the curtis keyer. I have the

schematic, but not the assembly documentation. It should be available from Wilderness Radio. I am wanting a Sierra, that is why I am selling the 40A. I will Ship the 40A in the US for \$125.00 please email direct if you are interested.

Thanks

Tim

NZ8J

Date: Fri, 2 Oct 1998 13:49:28 +1000
From: "Luke Enriquez" <lenr1@students.latrobe.edu.au>
To: <qrp-1@Lehigh.EDU>
Subject: [21339] Info about EPS-1
Message-ID: <01bdebd7\$a7b4e450\$082dac83@tiger_8.ee.latrobe.edu.au>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

G'day All,

Could someone enlightening me on the type/model of switch mode power supply chip used in the EPS-1.
I'm interested in purchasing the EPS-1 but I would need to modify it to accept a higher input voltage. I'm also interested in the speed of the switching regulator. Has anybody done EMI/RFI tests with the unit itself?

Regards,

Luke

lenr1@students.latrobe.edu.au

Date: Thu, 1 Oct 1998 20:30:17 -0700 (PDT)
From: camqrp@cyberg8t.com (Cam Hartford)
To: qrp-1@Lehigh.EDU
Subject: [21340] ARCI Fall QSO Party
Message-ID: <199810020330.UAA20226@trex.cyberg8t.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang-

I flipped the calendar page over today and it hit me - this is October, month of the Fall QSO Party!

For all you QRP contesters, it's time to tune up the radios, clean the bugs out of the antenna traps, and get re-acquainted with your favorite logging program. It's a great opportunity to work plenty of QRP friends and collect needed states and countries along the way. Last fall we had logs from eight DX countries, 4 Provinces and 45 States. The way the sunspots are shining, this fall should prove to be even better.

Now is the time to start getting your Teams together. Team competition has been expanded to include Multi-Op classes, so let your creative competitive juices flow. I'll publish a list of teams here on the list as I receive them. And don't forget that we also recognize Portable operations. Here's a good chance to make up for lost fun if you missed QRP Afield.

Rules follow. See you there -

72/73,

Cam N6GA

(Pacificon attendees are excused, but only if you agree to have a blast at the get-together...)

FALL QSO PARTY

Date/Time:

October 17, 1998, 1200Z through October 18, 2400Z. Work a maximum of 24 hours of the 36 hour period. CW only.

Exchange: Member - RST, State/Province/Country, ARCI Number
Non-Member - RST, State/Province/Country, Power Out

QSO Points: Member = 5 Points; Non-Member, Different Continent = 4
Points Non-Member, Same Continent = 2 Points

Multiplier: SPC (State/Province/Country) total for all bands.
S/P/Cs may be worked on more than one band for credit.

Power Multiplier:

0 - 250 MW = X 15; 250 MW - 1 Watt = X 10

1 W - 5 W = X 7; Over 5 W = X 1.

Suggested Frequencies:

	GENERAL	NOVICE
160 Meters	1810 KHz	
80 Meters	3560 KHz 3710 KHz	
40 Meters	7040 KHz	7110 KHz
20 Meter	14060 KHz	
15 Meters	21060 KHz	21110 KHz
10 Meters	28060 KHz	28110 KHz
6 Meters	50128 KHz	

Score:

Points (total for all bands) X SPCs (total for all bands) X Power Multiplier.

Team Competition: Competition between teams consisting of 2 to 5 members will be a separate category apart from individual entries. Team members will be listed as individuals and the team score will be the total of the members' scores. The team captain must send a list of team members to the contest manager postmarked at least one day prior to the QSO Party.

Multi-Op Class: Submit list of operators and number of transmitters in simultaneous operation.

Portable Operation: Submit information on location of operation, list of operators and number of transmitters in simultaneous operation.

Entry may be an All-Band, Single Band, Hi-Band (20M, 15M, 10M and 6M) or Lo-Band (160M, 80M and 40M). Certificates to the top 10 scores, to the top score in each Single-band, Lo-band and Hi-band class, and to the top score in each class in each SPC. The contest manager reserves the right to recognize special significant entries with a certificate award.

Entry includes a copy of the logs and a separate summary sheet. Include duplicate check sheets with entries of 100 QSOs or more. Indicate total time-on-the-air, and include a legible name, call, QRP ARCI Number (if any) and address.

All entries must be received within 30 days of the contest date. Late entries will be counted as check logs. Members and non-members indicate their output power for each band. The highest power used will determine the power multiplier. Output power is considered as 1/2 of input power.

Include a description of homebrew equipment, commercial equipment, and antennas used with each entry. Send an SASE for a summary and sample log sheets. Include an SASE with your entry for a copy of the results. Results will be published in the next available issue of the QRP ARCI Quarterly. The final decision on all matters concerning the contests rests with the contest manager.

Entries are welcome via E-Mail to CamQRP@cyberg8t.com, or by mail to:

Cam Hartford, N6GA
1959 Bridgeport Ave.
Claremont, CA 91711

Date: Thu, 01 Oct 1998 21:12:35 +0000
From: Bob Hightower <ki7mn@extremezone.com>
To: qrp-l@Lehigh.EDU
Subject: [21341] Re: Astron RS-35A Schematic
Message-ID: <199810020404.VAA20736@enterprise.extremezone.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks to all the many, many who replied. The consensus seems to be to check the pass transistors, and the UA-723 regulator. So, that's what I will do. Thanks again.

Bob Hightower KI7MN <http://www.dancris.com/~ki7mn>

[Please note change in e-mail address (return address above)]

Date: Thu, 01 Oct 1998 21:34:23 PDT
From: "Bruce Prior" <n7rr@hotmail.com>
To: qrp-l@Lehigh.EDU, thom@li.net
Subject: [21342] Re: Loop Antennas, Dx and qrp
Message-ID: <19981002043424.21460.qmail@hotmail.com>
Content-Type: text/plain

Dear Tom:

I can't help you on the theoretical side, but my experience with roof-mounted antennas in Jamaica and Tajikistan is that horizontal loops tuned for 40 m outperformed dipoles and several different monoband half-squares. I managed to get our new landlady's blessing to install a loop on the roof of a duplex in Blaine, WA, which we occupied starting today. (Incidentally, I think calling it a "radio wire" made it sound much more benign than an "amateur radio antenna!") Tomorrow is installation day. I'll use insulated #14 stranded wire, fed by ladder-line to the tuner in the second-storey shack. The roof is wood with tar-paper shingles. I will lay the loop along the outside edge of a pitched roof, so there will be a slight inverted vee aspect to the

basically-horizontal loop. CW Sweepstakes will be the big test, perhaps with a bit of fox chasing in between for practice! GL and 72, Bruce Prior, N7RR / VE7HR

>

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Fri, 2 Oct 1998 01:15:33 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@Lehigh.EDU
Subject: [21343] NEED AN EXTERMINATION TEAM
Message-ID: <7134a22b.36146175@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

OK OK all this talk about BUG TEAMS...I think the straight key folks need to form a team of strategically placed operators to stomp out the BUGS!

Enuff is enuff. These pesky critters need to be exterminated. So how about it you STRAIGHT KEY people? It is time to rise up and take hold of the situation. Do we have some good old brass pounders left?

Alan KB7MBI

Date: Fri, 2 Oct 1998 01:37:18 -0400 (EDT)
From: hsilver@pyx.net
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21344] Re: NEED AN EXTERMINATION TEAM
Message-ID: <Pine.LNX.3.95.981002013523.26403A-100000@matrix.pyx.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 2 Oct 1998 ARDUJENSKI@aol.com wrote:

> OK OK all this talk about BUG TEAMS...I think the straight key folks need to
> form a team of strategically placed operators to stomp out the BUGS!

>
> Enuff is enuff. These pesky critters need to be exterminated. So how about it
> you STRAIGHT KEY people? It is time to rise up and take hold of the situation.
> Do we have some good old brass pounders left?
>
> Alan KB7MBI

I guess the mere mention of iambic or non-iambic
paddles wud bring shrieks ! :)

73

Harley Silver

Date: Thu, 1 Oct 1998 23:15:53 -0700
From: "Radman" <radman@best.com>
To: <gsurrency@juno.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [21345] Re: PCB drills, etc.
Message-ID: <199810020613.XAA21077@proxy3.ba.best.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Gang,

Living on the northern end of Silicon Valley -- where
there are more PC board shops than barber shops -- I
thought I should look into the this PCB hole drilling
issue. I checked into the Jameco "drill press" and learned
that it's an 11,500 rpm Dremmel-type of design with the
accessory "press." It comes with four or five collets that
will accept PC drill bits, commonly with 0.125" shanks
that are "necked down" to the appropriate hole size.
Jameco stocks three common sizes of bits -- # 59, # 68 & #
75. These aren't the high-speed steel (HSS) twist drill
designs, such as you'd find down at Sears, these are PC
drill bits - \$1.75 ea. The sales support fellow I talked
with seemed to feel that 11,500 rpm is none to slow for
shooting holes in glass boards. Drill and base cost:
\$47.00.

Next stop was the local Post Tool Store -- more of a
wood-worker's store -- where I performed a live demo on a

Delta table-top drill press, spinning a #60 HSS bit at 6,500 rpm. I could see a lot of run-out and whip in the bit. The manager found some carbide #72 bits and we re-chucked. The much stiffer (harder) bit that ran very true. (Wish I'd had a piece of glass epoxy stock to shoot some practice holes!) The little Delta cost \$115, had step-pulleys, cast iron base and table -- and it looked like it would do some honest work with its 0.5" (13mm) chuck. I was impressed that the chuck could close on a #72 bit -- dang! (but, its a very slow spinner.)

Next I called a buddy who works as foreman in a "quick-turn" board house a few miles down the road. I told him I was thinking of buying a drill press to make some proto-boards. He found the idea "quaint." His shop runs 3-axis numerical controlled routers running at 53,000 to 80,000 rpm for the bulk of their work. When they drill the really small holes (0.010 - 0.005") they crank it up to 100,000 rpm. Advice from my buddy: "Speed is good! But, it's only as good as your Z-axis is true. If your bit is whipping all over the place from poor tolerance or flex -- you'll break bits in a second. If everything is running true.... 2,000 holes per bit is very common for stacks of three boards, which is 6,000 holes per bit at well over 50,000 rpm!" His system only costs \$100K per router head, but that includes the 3-axis software! His final remark was that the home hobbyist probably can't spin a bit faster than 11K-12K without breakage, due to tolerance. (Hmmm!)

You know, what would be very cool? A small precision drill press that was variable speed up to 15K rpm for not a lot of \$\$\$\$. I'm looking into it. Some of you guys must have checked into this? I wonder if you can spin a 3-jaw chuck at 15K rpm. Anyone ?

That reminds me... I've got to make a dental appointment ;)

72 - Conrad Weiss - NN6CW

Date: Fri, 2 Oct 1998 02:18:41 -0400
From: kd4pvm@juno.com (Paul W Bridgeman)
To: qrp-l@Lehigh.EDU
Subject: [21346] MFJ 9040

Fax: +81 3 3866 7881

If you want to purchase Mizuho or Nishi products, please send your order to Mr. Sasaki in TOPTRON Corp. by fax or postal mail (E-mail is not available). He'll reply about the cost and payment method.

When you need Mizuho MX series, please advise him which crystal you need (or what frequency you want to QRV). Because, the basic oscillator of MX series is VX0, then tunable band width is limited, typically 50 kHz with one crystal.

For example,

X'tal#	Band
14X00	14.000~14.050 MHz
14X05	14.050~14.100 MHz
14X10	14.100~14.150 MHz
14X15	14.150~14.200 MHz
14X20	14.200~14.250 MHz
14X25	14.250~14.300 MHz
14X30	14.300~14.350 MHz

is provided for MX-14S. One of these is already installed to MX-14S (Maybe 14X25, sorry I forget...), the others are option. The price of crystal is @JPY1,500.

Nishi's products are very similar to Mizuho MX series. NTS-200 for 2m, NTS-700 is for 430 MHz. Unfortunately, NTS-700 works only on 430.15~430.25 MHz. I have experience to ask Nishi to modify it to 432 MHz, however they refuse it :- (US amateurs must modify it by themselves.

On the contrary, NTS-200 is FB in US band plan. It can work on 144.15~144.25 MHz. Specification is as follows.

```
### MODEL NTS-200 (144MHz SSB 1W Tranceiver) ###
Frequency  : 144.15 - 144.25 MHz
Mode       : SSB(USB)
Suppl Vol  : 9V DC
            AA type x 6
Current    : RX 35 mA [at no signal input]
            TX 700 mA [MAX]
Output Imp : 50 ohm
Dim        : (W)65 x (H)38 x (D)142 mm
Output Pwr : 1 watt [MAX]
Rcvr Part  : Single Super Heterodyne
Sensitivity: input 0.2 micro volt -> S/N > 10dB
Price      : JPY30,500- (in 1995)
```


Older time, they had released CW unit, but now discontinued.
You can see the image of this product on web page.

<http://www4.justnet.ne.jp/~nishiyuji/>

And, E-mail address is,

nishiyuji@ma4.justnet.ne.jp

however, I don't know whether they can reply to the message from outside JA.

--

73 Masa J02AJT/WH20 ex-JL7CLE muchida@postman.riken.go.jp

Date: Fri, 02 Oct 1998 00:32:48 -0700
From: Dave Fifield <fifield@pacbell.net>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [21348] @@@*** Norcal 20 Status Update ***@@@
Message-ID: <361481A0.3D42@pacbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

To all those patient folks who've ordered a Norcal 20 rig,

First let me congratulate you all - I have not received a single nagging email asking when it will be done! That shows great restraint and consideration. Thanks guys! I really appreciate that. After Dayton, things went slow for a while (whilst Doug was off on his world tour, so he wasn't around to nag me into action) then it picked up for a while mid-summer and then slowed down (a lot) when I moved jobs to work for a small Si Valley start-up. It seems like I'm doing two jobs at the moment: Epigram in the daytime and Norcal at night! (some mornings, I'm definately very zombieified!) I can promise you all, the wait was definately worth it: the NC20 radio is now REALLY nice to operate, and is in every way far superior to the original design.

I just wrangled the last "bug" out of the design tonight. Boy this has been an experience - come along to Pacificon and I'll tell you all about it!

Since some of you saw the first prototypes at Dayton the design has grown and grown and GROWN! There are now about 50% more components in it than that (simple) first prototype! The circuit diagram now takes up 5 sheets (first proto was just 2 sheets). It now has RIT (plus a simple XIT mod), smooth AGC, a new RX audio lineup and a completely new TX altogether. We decided to dispense with using a MOSFET output stage - it had problems.....I'll say something about that in my talk at Pacificon.

There is still work to do before the kits will be ready for shipping however. Doug has been ordering parts like crazy. That guy is a genius! He seems to get the best deals with the shortest lead times I have ever seen!! I'd hire him as our engineering/production/planning manager anyway!

We have a final set of prototypes to build now, then we can committ to the final PCB layout (that HAS to be right before we spend the money on them).

With my "bench" prototype tonight with 5 Watts out, I worked LU3XQ (579), PY4PZ (559) and then, as I was doing some on-air testing sending strings of dits, someone broke in on me and so I had a nice chat with him. Turns out it was a guy called George, WB0HAB, who said this was his first CW QSO for TWENTY YEARS!!! Boy, he was cool, we were probably going at between 15 and 20 wpm, and his CW was cleaner than mine! Somehow, he guessed I was using only 5W and knew to send me 72 instead of 73 (? are you a "lurker" on this list I wonder George?).

That's the news. I'm really sorry we didn't get them out before Pacificon folks, but events just conspired against us. Hey, since when has ANY of the kits/rigs appeared "on-time"? ;-)

We'll have some nice protos for you to see/feel/operate at Pacificon and I 'think' the kits should be ready to ship out in early November - but don't quote me on that, it all depends on the component, metalwork and PCB leadtimes.

That's all for now. Hope I have alleviated some of your anxiety! (sheesh, it sure is load off MY mind that the rig works nicely now, I was beginning to worry if it'd ever be done!)

I'll try to post regular status updates from now on.

TTFN,
Dave Fifield

AD6AY

Date: Thu, 1 Oct 1998 15:33:54 +0100
From: Dick G0BPS <Dick@kanga.demon.co.uk>
To: qrp-1@Lehigh.EDU
Cc: qrp-1@blacksheep.org
Subject: [21349] Auction HW9 etc. More info
Message-ID: <xoPF8RASL5E2Ew00@kanga.demon.co.uk>
MIME-Version: 1.0

I have received more info about the mods for the HW9 up for auction.

The modifications are well known in ARCI circles. They are by KB1MJ. One is to replace the filter and improve the dynamic range. It turned my HW9 into a SERIOUS RX. The other is a digital readout mod. Both are probably best fitted after initial assembly following Heathkit guidelines. Documentation for these will be easy to obtain and I believe both have appeared in the Quarterly.

TTFN de ..

--

Dick Pascoe G0BPS
Kanga Products
Seaview House, Crete Road East
Folkestone CT18 7EG U.K.
Tel 44 (0) 1303 891106
<http://www.kanga.demon.co.uk>

Dayton & Freiderichshafen
All in my own time and cost!

Date: Fri, 02 Oct 1998 06:41:24 -0400
From: mikemo@ibm.net
To: qrp <qrp-1@Lehigh.EDU>
Subject: [21350] JOTA
Message-ID: <3614ADD4.4911@ibm.net>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Is anyone on the list participating in JOTA with the Boy Scouts? If so please email me in private. I'm looking for some details as well as a possible sked.

Thanks!

ku4qo, Mike Maiorana, Palm Harbor, FL

Date: Fri, 02 Oct 1998 07:10:32 -0400
From: "W. Kimura" <w.kimura@valley.net>
To: qrp-l@lehigh.edu
Subject: [21351] Re: NEED AN EXTERMINATION TEAM
Message-ID: <199810021110.HAA11529@orford.valley.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Once had a qso with a guy that described his key as a piece of hacksaw blade on a block of wood!

"Saw Key" operators arise! ;0)

72,

Kim Kimura N1MVU

At 01:37 AM 10/2/98 -0400, you wrote:

>

>

>On Fri, 2 Oct 1998 ARDUJENSKI@aol.com wrote:

>

>> OK OK all this talk about BUG TEAMS...I think the straight key folks need to
>> form a team of strategicly placed operators to stomp out the BUGS!

>>

>> Enuff is enuff. These pesky critters need to be exterminated. So how about it
>> you STRAIGHT KEY people? It is time to rise up and take hold of the
situation.

>> Do we have some good old brass pounders left?

>>

>> Alan KB7MBI

>

>I guess the mere mention of iambic or non-iambic

>paddles wud bring shrieks ! :)

>
>73
>
>Harley Silver

Date: Fri, 02 Oct 1998 06:11:03 -0500
From: Wayne Alexander <walexan@ipa.net>
To: qrp-l@Lehigh.EDU
Subject: [21352] Re: NEED AN EXTERMINATION TEAM
Message-ID: <199810021112.GAA01536@ns3.ipa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 01:15 AM 10/2/98 -0400, you wrote:

>OK OK all this talk about BUG TEAMS...I think the straight key folks need to
>form a team of strategicly placed operators to stomp out the BUGS!

>
>Enuff is enuff. These pesky critters need to be exterminated. So how about it
>you STRAIGHT KEY people? It is time to rise up and take hold of the
situation.

>Do we have some good old brass pounders left?

>
>Alan KB7MBI

How about a McElroy Chrome Tear drop straight key. I like bugs also,don't
want to kill them,their are too much fun.

73,
KB0PTE
Wayne
FISTS # 4907
QRP-L # 1058

Date: Fri, 2 Oct 1998 07:36:59 -0400
From: DNT1@chrysler.com
To: pmbail01@ox.slug.louisville.edu
Cc: qrp-l@Lehigh.EDU
Subject: [21353] Re: Well, now, this is just ky00t. :)
Message-ID: <85256691.003FBEBB.00@lngodd02.notes.chrysler.com>
Mime-Version: 1.0

Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Paula Baily wrote:

> I may well have to pick up one of these...for some reason the idea of a
2m
> H/T that is liteally the same size as an Altoids tin *lid* appeals to me
:)

Actually, you could probably fit 3 or 4 of these in an Altoids tin! Just think, if they offered them on 1.25M & 23CM you could fit a pretty complete QRP VHF station in your shirt pocket. All you'd need is 6M to have complete coverage on the most common VHF bands! It's too bad that they're FM only, that could be a really neat portable station!

Don T. KD4RHH QRP-L#1670

Date: Fri, 2 Oct 1998 07:53:23 EDT
From: Wb4jjj@aol.com
To: qrp-l@Lehigh.EDU
Subject: [21354] Oscilloscopes, redux
Message-ID: <fa553b98.3614beb3@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

I am reading the book "Oscilloscopes: Selecting and Restoring a Classic" as recommended on this list. It covers older tube-type Tectronics scopes only. Fine book, with a photo catalogue and descriptions and suggested prices on these rigs. Some of these look like they are in my price range (cheap). Some are dogs, however.

Now I need the url for the guy in Wisconsin or Minnesota someone recommended as a trustworthy dealer that was mentioned here a month or so ago. You'll remember him as the one who knows little about scopes but who has the son with the EE Phd who checks them out, etc.

Can someone e-mail me the address off list? Thanks.

73, Alan A. Wheeler, WB4JJJ

Fairfax, VA

Date: Fri, 02 Oct 1998 07:20:53 -0500
From: Wayne Alexander <walexan@ipa.net>
To: qrp-l@Lehigh.EDU
Subject: [21355] Re: NEED AN EXTERMINATION TEAM
Message-ID: <199810021221.HAA03431@ns3.ipa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 07:56 AM 10/2/98 -0400, you wrote:

.
>
>Don't want to kill the bugs, just the poor operators that use them. There
>are some good ones. Don't think
>-.....
>is acceptable for N, D, B, or 6.
>
>73 jerry w8gnd

If you use the bug correctly you will not be able to tell that it is a bug.
It takes a lot of practice, but there are people that have a style with
there bug and you will know them by that. There is a guy in my town here
that can use a bug and you ill never know he using it unless he tells you.
He hardly ever gets on the air he listens and practice sending with his
bug. Oh well some people don't like them and some do, that's what makes the
world go around. Have a good day.

73,
KB0PTE
Wayne
FISTS # 4907
QRP-L # 1058

Date: Fri, 2 Oct 1998 08:28:08 -0400 (EDT)
From: "Paul R. Valko" <prvalko@oakland.edu>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [21356] FOX: Overview of the 1998/9 QRP-L Foxhunt
Message-ID: <Pine.0SF.3.95.981002082531.22196E-100000@vela.acs.oakland.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

OVERVIEW

For those of you new to the list and haven't read through all the archives for the past four years here is a brief overview:

The QRP-L Fox-Hunt is arguably the most popular QRP operating event on the planet. Thousands of two-way QRP QSO's have been generated during this event since Chuck Adams (K5FO) started the first Foxhunt five years ago. I'll borrow from Chuck here, to explain...

Starting the first full week of October, and for approximately 22 weeks (until Mar 4th 1999) thereafter we get two of the individuals on this list to get on the air for two hours at a predetermined date and time each week. This on 40M CW and during the middle of the week.

This gets us on the air when there are no contests, sprints, or world wide pileups fighting for points. We generate our own microcosm of those larger contests. I think that those that participated enjoyed it very much and the flurry of posts the days after (which were not enjoyed by everyone and hated by a few) really showed interest with lots of tales of worked and not worked and some feel for how difficult two way QRP QSOs are to get going.

The "fox" posts the list of contacts within a few days afterwards and W8KC periodically posts updates on the "scores".

73! =paul= W8KC

Collector of Ten*Tecs and other fine plastics

<<http://www.acs.oakland.edu/~prvalko>>

Date: Fri, 2 Oct 1998 08:30:30 -0400 (EDT)
From: "Paul R. Valko" <prvalko@oakland.edu>
To: QRP List <qrp-l@lehigh.edu>
Subject: [21357] FOX: OFFICIAL FOXHUNT RULES AND SCHEDULE v2.0 (fwd)
Message-ID: <Pine.OSF.3.95.981002082820.22196F-100000@vela.acs.oakland.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang.

Here we go, what you all have been waiting for. Please print and keep near your operating position. No big changes since the first (v1.00) posting - just some rule clarifications. Like Chuck says, it's supposed to be fun and easy.

Remember to stay tuned to QRP-L throughout the Foxhunt season to listen for announcements of Special Guest Foxii!

1 9 9 8 - 1 9 9 9 Q R P - L F O X H U N T !

Version 2.0

DEFINITIONS

QRP = 5 watts or less RF output from the transmitter.
QRO = any power greater than 5 watts.
Fox = the station everyone tries to work. Also know as foxii, the fox, the wily one, the bushy tailed SOB, etc.
Hound = any station trying to work the fox. Also known as the hound, hunter, hunters, the skunked, the pile-up.
W8KC = Paul Valko, runs the foxhunt. Also known as, =paul=, The collector of TenTecs and other fine plastics, Rule Maker, Rule Definer, Peace Keeper, Butt Kicker, etc.

Split = Classic DX-style operation on two distinctly different frequencies.

RULES

1.0 OBJECTIVE - The objective is to HAVE FUN.

1.1 GENERAL FOX GUIDELINES

1.12 Fox try to complete as many two-way, CW, QRP, QRP-L member QSOs - as possible, in a 2 hour long time period.

1.13 Fox must post PRIOR to operation day with details (rig, ant, freq) regarding their operation.

1.14 Fox will operate within +/- 10Khz of 7.040 MHz but should make an effort to AVOID operating directly on 7.040.

1.141 ONLY the Fox will call CQ FOX, CQ FOXHUNT, etc.

1.15 Fox will be allowed to QSY to avoid QRM.

1.16 Fox WILL NOT operate "split."

1.2 GENERAL HOUND GUIDELINES

1.21 Hounds ONLY work the Fox.

1.211 Hounds ONLY ANSWER the FOX CQ - Hounds do not call CQ FOX.

1.22 Hounds must NOT QRM the Fox Frequency after the QSO.

1.23 Hounds, work as many Foxii as possible over the 22 weeks of the Foxhunt.

1.24 Hunters must be QRP to get the one point credit. This allows the fox to get 1 point for casual ops who are running >5 watts and stray into the foxhunt.

1.3 Hound must be QRP if giving a qrp-l number.

2.0 SCORING SYSTEM - Points are awarded as follows:

SCORE

2.1 QRO Station works fox and receives 0 points

2.2 Fox works QRO station (no pwr rcvd) 1 point

2.3 If two-way QRP (Hound reports <= 5W) 2 points

If two-way QRP-L number is exchanged 3 points

2.31 Instructions to get your QRP-L Number are at the bottom of this message.

2.4 Maximum points for any one QSO is 3 points.

2.5 EXCHANGE

2.51 A successful QSO MUST exchange as a minimum Callsigns, RST reports, and QTH.

2.52 Any other information exchanged (names, rigs, etc.) is at the operator's discretion but is superfluous.

2.521 Operators are welcome to include that detail in the posted report but the FOX LOG must be posted as detailed in rule 3.2.

2.6 If hunter gives power <= 5 watts, obviously that counts as a two-way QRP QSO worth 2 points.

2.7 If hunter also gives QRP-L Number, that will be a 3 pt QSO.

3.0 REPORTING SYSTEM

3.1 Foxii LOGS MUST be posted to QRP-L with a copy also sent to: prvalko@oakland.edu

3.11 Posts to QRP-L Regarding the Foxhunt should begin with "FOX:"
to enable filters to do their magic.

3.2 The Foxii log shall have the following layout:

TIME	STATION	FOX	HOUND	HOUND	HOUND	HOUND	
GMT	WORKED	RST	RST	QTH	QRP-L#	POWER	POINTS

as an example...

0200	w8kc	559	559	mi	59	2w	3
0201	wq9rp		579	579	wi	.9w	2
0202	n8iin		599	559	mi		1
						TOTAL	6 POINTS

3.3 The Fox is responsible and is to be honorable in reporting scores.

3.31 All information exchanged must be done during the QS0, electronic
"fills" via email are not permitted.

3.4 Hounds are encouraged to report both successful AND failed hunts
to QRP-L (I do not need a Hound Log). This is also a propagation
study, you know.

4.0 SPECIAL FOX EVENTS

4.1 A Special Event Fox may pop up once or twice to keep hunters
on their toes. Stay tuned to QRP-L for these announcements.

4.2 A Novice Foxhunt will begin sometime in November.

4.5 There is a "Bye Date" where no fox is scheduled.

4.6 No Foxhunt is planned during Straight Key Night.

4.7 Any "sub-contest" such as "team competition" is the sole
responsibility of the person who decides to run one.

4.71 Sub-contests must in no way interfere with the rules and smooth
operation of the AUTHORIZED QRP-L FOXHUNT.

1998/1999 FOX SCHEDULE VERSION 1.00

WEEK	GMT DATE	FOX OP	FOX QTH	START TIME(Z)	GMT DATE	FOX OP	FOX QTH	START TIME(Z)
1	10/7	AB5UA		OK 0200	10/9	WQ8RP	MI	0100
2	10/14		WA8GHZ	TX 0100	10/16		W8RU MI	0200
3	10/21		KV2X NY	0200	10/23		K8CV MI	0200
4	10/28		N2TO NY	0100	10/30		KU7Y NV	0100
5	11/4	AB5UA		OK 0200	11/6	N1FN CO		0300
6	11/11		K1MG CA	0200	11/13		WA8GHZ TX	0200
7	11/18		AB0GO	CO 0200	11/20		K8CV MI	0200
8	11/25		W5TFB	TX 0200	11/27		KB7MBI WA	0200
9	12/2	N0UR MN		0100	12/4	WS4S TN		0300
10	12/9	N7CQR		OR 0200	12/11		N2TO NY	0200
11	12/16		K5ZTY	TX 0200	12/18		N2SMH NJ	0100
12	12/23		WQ8RP	MI 0100	12/25		KB7MBI WA	0200
13	12/30		VE7DXJ	BC 0200	1/1/99		*** SKN ***	

14	1/6	** BYE DATE **		1/8	VE7DXJ	BC	0300
15	1/13	K0EVZ	ND	0200	1/15 N7CQR	OR	0300
16	1/20	N2SMH	NJ	0100	1/22 W8RU MI		0200
17	1/27	N0UR MN		0100	1/29 WS4S TN		0300
18	2/3	W5TFB	TX	0200	2/5 K1MG CA		0100
19	2/10	KV2X NY		0200	2/12 AB0G0	CO	0200
20	2/17	K0EVZ	ND	0200	2/19 VE7CQK	BC	0100
21	2/24	KU7Y NV		0100	2/26 N1FN CO		0300
22	3/3	VE7CQK	BC	0100	3/5 K5ZTY	TX	0200

FOX EMAIL ADDRESSES

Dave Ek <ekdave@earthlink.net>,
 Clifton W Sikes <ab5uacw@juno.com>,
 "Wilford D. Lindsey" <70511.3041@compuserve.com>,
 "Michael A. Gipe" <mgipe@reliablemeters.com>,
 k5zty@juno.com,
 Walt Amos <waltk8cv@ameritech.net>,
 Hank Kohl K8DD <k8dd@contesting.com>,
 ARDUJENSKI@aol.com,
 Monte Stark <ku7y@dri.edu>,
 Thomas Jennings <jennings@eng14.rochny.uspra.abb.com>,
 Lageson's <LAGESON@worldnet.att.net>,
 Marshall Emm <mgemm@mtechnologies.com>,
 David Maliniak <dmaliniak@penton.com>,
 "Kevin F. Glynn" <kfglynn@prodigy.net>,
 Dan Presley <talljazz@teleport.com>,
 Paul Erickson <paule@sfu.ca>,
 "C. Leung" <cleung@cln.etc.bc.ca>,
 Jack Bryant <Jack.Bryant@math.tamu.edu>,
 Ron Majewski <majewski@erim-int.com>,
 JFD / WA8GHZ /5 <jdougher@wt.net>,
 Conard Murray <ws4s@infoave.net>

OBTAINING A QRP-L MEMBER NUMBER

Use this command to obtain a QRP-L member number.

RUN QRP-L X GETNR callsign

example: RUN QRP-L X GETNR W8KC

where "callsign" is your callsign. Send this in the body of a message to LISTSERV@LEHIGH.EDU. Use the word NONE if you don't yet have a callsign. The list of assigned member numbers can be had via the command, also to LISTSERV@LEHIGH.EDU:

GET QRP-L/MISC MEMBER_NUMBERS.TXT

That's it for now gang! Unleash the hounds!!!

73! =paul= W8KC
Collector of Ten*Tecs and other fine plastics

<<http://www.acs.oakland.edu/~prvalko>>

Date: Fri, 2 Oct 1998 07:41:31 -0500 (CDT)
From: ac5ez@webtv.net (Larry B)
To: qrp-1@Lehigh.EDU
Subject: [21358] Bugs mating call
Message-ID: <4607-3614C9FB-543@mailtod-122.bryant.webtv.net>
Content-Type: Text/Plain; Charset=US-ASCII
Content-Transfer-Encoding: 7Bit
MIME-Version: 1.0 (WebTV)
Content-Transfer-Encoding: 7Bit

You can always tell a bug by its odd
mating call. Daaaaaaahditdit dit
Ac5ez

Date: Fri, 02 Oct 1998 06:10:26 -0700
From: mikerice@abtcorp.com (Mike Rice)
To: qrp-1@lehigh.edu
Subject: [21359] Re: PCB drills, stone age
Message-ID: <3614D0C2.D53F1955@abtcorp.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Gently fasten the PCB in a bench vise and use a 1/16" or a 3/16" bit
with a large hand-drill (egg-beater yet not a brace). I'm pretty good
at it now.

That's qrp drilling...72

--

Mike Rice kb0nnd
ABT Technical Support
mrice@abtcorp.com

Date: Sun, 04 Oct 1998 06:25:23 -0500
From: David Heintzleman <bchurch@megavision.com>
To: qrp-1@Lehigh.EDU
Subject: [21360] loops
Message-ID: <36175B22.C912776C@megavision.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Have enjoyed the posts on loops - in 1985 read QST article about
horizontal loops, think it was Sep-Oct, 85--- and had the space - so for
a time had an 80 mtr horizontal loop, 40 feet up, fed near corner with
450 ohm ladder line. One winter replaced it with 160 mtr loop and used
it until storms kept taking it down, went back to 80 mtr loop for 4
years

from 85-89, had excellent multiband performance. found I needed tuner with roller inductor, favorites were TenTec L network (KW tuner) even if I ran QRP, or MFJ KW --

on fundamental freq, had excellent coast to coast, on 30-10, had fantastic dx, spent most of those years on QRP except for 75 mtr traffic net.

My QTH was SW Nebraska, participated regularly in winter on GLETN, 75 mtr fone-

chose to feed just off from a corner to intentionally skew radiation pattern from possible rhombic bidirectional pattern. did find fairly omnidirectional - loop was almost a perfect square - best low-noise receive antenna ever had in 36 years of hamming

published small note in "The Five Watter", MI QRP Journal in late 80's about my experience.

Sorry that I moved and no longer had the real estate.

AT last QTH, did hang two multiband delta loops for 80 mtrs from tower, vertical, except for slope off tower about 40 deg - fed at corner with 450 ladder line, found on 20 mtrs, excellent dx, as W1FB said he did -

73, Dave K8BBM (was N0BQW for some years) MI QRP 124,

Date: Fri, 2 Oct 1998 09:55:56 -0400
From: wgabriel@dukeengineering.com
To: qrp-l@Lehigh.EDU
Subject: [21361] PCB Drilling
Message-ID: <85256691.004C5380.00@dpinet01.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

I get all my PWB drills from Hosfelt Electronics in Ohio -- 800-524-6464 or 888-264-6464. They are the carbide type with 1/8 inch shanks so they will easily fit in a standard drill chuck very easily. They sell an assortment as well as individual sizes. I found the assortment has lots of sizes that I would not use very often so usually just purchase packs of 5 of the sizes I need. Very reasonably priced.

For drilling, I typically just use my drill press, although at times have used a Dremel tool.

And do heed the warnings already passed on about the brittleness of small carbide drills.

Watson/WB4EXW

Date: Fri, 02 Oct 1998 09:58:11 -0400
From: Scott Howell <whowell@hq.nasa.gov>
To: qrp-l@lehigh.edu
Subject: [21362] caps and values
Message-ID: <3.0.5.32.19981002095811.007dc5f0@mail.hq.nasa.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

tnx to all who responded to my request for info on the caps. I realized the resistors have colors where caps have the numbers in most cases on them. I realized this once I had sent the msg. In any event that will make it easier for my Xyl to look at them. In any case tnx to all agn.

cul es 72/73
Scott/n3byy
Laurel MD

Date: Fri, 2 Oct 1998 10:06:09 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: Peter Pavlovich <radioroom@hotmail.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21363] Re: HW-9 manual help
Message-ID: <Pine.LNX.3.93.981002100332.1086A-100000@dns>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Thu, 1 Oct 1998, Peter Pavlovich wrote:

> Help!! I am looking for any HW-9 owner who could make a copy of his HW-9
> manual for me. I'm sure its got lot's of pages but I'd be more than

Peter,

If you haven't gotten a copy yet lemme' know and I'll blast one out to you. Are you gud in the book? No compensation required, I just got a "free" service manual and schematic from the group, so I "owe" one to somebody:) Also the Hot Water Handbook that covers the HW-9 if your interested in a copy...

72

```
-- Chris Cartwright,   Technical Engineer   |   ccart@vidtel.com   --  
-- N3XRV      ARRL-VE   Norcal Zombie #163   |   Gaithersburg, MD FM19je   --  
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --
```

Date: Fri, 2 Oct 1998 10:11:56 -0400 (EDT)
From: James Skalski <jskalski@buffnet.net>
To: qrp-l@Lehigh.EDU
Subject: [21364] Drill sizes?
Message-ID: <Pine.LNX.4.03.9810021010450.793-1000000@valhalla.valhalla.buffalo.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

What are the most popular drill sizes used for pcb fabrication?
Any pearls here?

73,

Jim (N2GO)

Date: Fri, 2 Oct 1998 08:18:08 -0600 (MDT)
From: Brian Mileschosky <n5zgt@swcp.com>
To: mikemo@ibm.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21365] Re: JOTA
Message-ID: <Pine.SUN.3.96.981002081004.28207A-1000000@kitsune.swcp.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Mike,

I'll reply to both you and the list in case people might be interested. My Venture Crew (<http://www.swcp.com/~n5zgt/post296>) will be participating in Jamboree On the Air from Scoutings best known places: Philmont Scout Ranch located in Northeast New Mexico. There will be a council-wide camping activity going on there called CampExpo, and around or over 2500 scouts and scouters will be present to take part in activities. My Crew (used to be called an Explorer Post, but some changes have been made by the Boy Scouts of America) will be there to give those guys a chance to experience Amateur Radio firsthand, and hopefully persuade them to join our ranks!

We have not decided on a call as of yet. Look for W5GUZ, KH6JTE or N5ZGT at the least. As far as QSL cards, we hope to have some really nice ones - or at least nice postcards from Philmont - to send out! E-mail me if you would like to see about meeting on the air per chance, although I cannot make any promises on schedules right now.

To all: I am Worldradio Magazine's Youth Forum columnist, and I will be looking for stories and pictures from people participating in JOTA! Please email me if you would like to send some comments or pictures in, because I would like to feature a few in my next column, which will appear in the January 1999 issue. Thanks!

72/Yours in Scouting,
Brian, N5ZGT

On Fri, 2 Oct 1998 mikemo@ibm.net wrote:

> Is anyone on the list participating in JOTA with the Boy Scouts? If so
> please email me in private. I'm looking for some details as well as a
> possible sked.
> Thanks!
> ku4qo, Mike Maiorana, Palm Harbor, FL
>
>

Date: Fri, 2 Oct 1998 10:24:01 -0400 (EDT)
From: James Skalski <jskalski@buffnet.net>
To: qrp-l@Lehigh.EDU
Subject: [21366] Trade Sovereign XS for gear
Message-ID: <Pine.LNX.4.03.9810021013350.793-1000000@valhalla.valhalla.buffalo.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have a Minelab's Sovereign XS metal detector in like new condition with

warranty card. It comes with optional 11" "Penetrator" hot coil, nicad pack/charger, hip mount bag, optional minelabs lcd display (used) and original factory boxes. The cooler weather is coming and maybe even snow is (eventually) on its way :- (This unit uses the most advanced technology available in metal detecting...ie broad band spectrum and operates over a broad spectrum of frequencies between 1.5kHz and 25.5 kHz.

microphone and key not included :-)

Will trade for ham radio equipment or whatever.

73,

Jim(N2G0)

Date: Fri, 2 Oct 1998 08:27:53 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: Brian Mileschosky <n5zgt@swcp.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [21367] Re: JOTA
Message-ID: <Pine.SOL.3.91.981002082035.4465A-1000000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

PacifiCon is always held in conjunction with JOTA. They always have a station or two setup in the hotel with hundreds of Boy Scouts roaming about. You always see them making QSO's and talking to other scouts on the air. So for those looking to make contacts with other scouts, snoop around 20M SSB and I'm sure you'll find these stations. The effort to work a couple of these stations and talk to a couple of scouts is a bit of encouragement for them that can go a long ways.

72, Paul NA5N

Date: Fri, 2 Oct 1998 10:45:11 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21368] Re: HW-9 manual help

Message-ID: <Pine.LNX.3.93.981002104206.1086C-1000000@dns>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 2 Oct 1998, Chris Cartwright wrote:

> somebody:) Also the Hot Water Handbook that covers the HW-9 if your
> interested in a copy...

Gang, been off my email for a week (out of practice 719 new messages) and accidentally sent this to the list. Rest assured that the copy of the HW Handbook is and "original". Don't want the copyright police at the door :)

72 es gud to be "back"

-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV ARRL-VE Norcal Zombie #163 | Gaithersburg, MD FM19je --
-- MDmW #5 NJ-QRP #105 QRP-L #655 NORCAL #1891 FISTS #5028 QRP-ARCI #9271 --

Date: Fri, 2 Oct 1998 11:16:20 -0400
From: wgabriel@dukeengineering.com
To: qrp-l@Lehigh.EDU
Subject: [21369] Re: Drill sizes?
Message-ID: <85256691.0053B007.00@dpinet01.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=us-ascii
Content-Disposition: inline

Jim and group - would have to look to be sure, but I think I use numbers around 55, 58, and 60 the most. Some time ago I took a look at the typical lead-diameters of most of the parts I commonly use and tried to use this information to minimize the number of different drills I needed to have. Probably use the #60 the most with typical components used - disk caps, 1/4-watt resistors, transistors, IC's, etc. The 55 and 58 will do for most larger stuff that I happen to run into. I don't worry about getting the carbide drills for corner mounting holes, etc as regular twist drills (non-carbide) would be more cost effective even though they don't last as long (but you can resharpen these pretty easily yourself on a bench grinder).

By minimizing the number of drills "in stock" it helps hold my cost down. And if I happen to run into a deal for #59's, I would surely buy them and use where I would normally use a #60!

There is nothing really magic about this. Just don't make holes too big or it creates some problems in soldering because of too much "air gap".

Watson/WB4EXW

What are the most popular drill sizes used for pcb fabrication?
Any pearls here?

73,

Jim (N2G0)

Date: Fri, 02 Oct 1998 09:18:05 PDT
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [21370] Re: PCB drills, stone age
Message-ID: <19981002161805.25744.qmail@hotmail.com>
Content-Type: text/plain

I use an old Miller's Falls hand drill even with #62 bits. It works for me (even after several cups of coffee). Instead of a vise I place the work flat on a piece of rubber sheet (like gasket material) to hold it stationary and to protect the bit when it breaks through.

Brad

>Gently fasten the PCB in a bench vise and use a 1/16" or a 3/16" bit
>with a large hand-drill (egg-beater yet not a brace). I'm pretty good
>at it now.
>That's qrp drilling...72

>--

>Mike Rice kb0nnd

>ABT Technical Support

>mrice@abtcorp.com

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Fri, 02 Oct 1998 09:18:28 -0700

From: Pierre Constantineau <pierre@cmpe.ubc.ca>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [21371] Return Loss Bridge Core

Message-ID: <3614FCD4.230F374B@cmpe.ubc.ca>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

Hi everyone,

Yesterday, I wanted to build myself a return loss bridge but after looking in my junkbok, I realized that I did not have the FT23-77 core needed from september 1997 QST article.

However I have a F23-43 core handy. Could I replace the FT23-77 core by a FT23-43 core and by adding a few turns to the 10 bifilar turns?

Thanks

--

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Pierre Constantineau B.Eng

Email: pierre@cmpe.ubc.ca

M. Applied Sciences Candidate

Phone: (604) 822-2913

Flash Smelting Group

Fax: (604) 822-4750

Centre For Metallurgical

111-2355 East Mall

Process Engineering

Vancouver, BC, Canada

U. of British Columbia .oooO

V6T 1Z4

<http://noname.cmpe.ubc.ca> ()

Oooo. Amateur Radio: VE7JPC

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 (_/

Date: Fri, 2 Oct 1998 12:27:40 EDT
From: DENNISMO@aol.com
To: qrp-1@Lehigh.EDU
Subject: [21372] Maybe QRP/ Maybe Not!
Message-ID: <d56d6a80.3614fefc@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi All --

A fellow from anothe reflector (non-ham) e-mailed me and told me he has a communications radio that he brought back from the Gulf War. He wanted to know if I knew anything about it so I naturally thought about you guys and gals. He said it is a Marconi FM R/T and weighs about 60 pounds.... not exactly a Backpacker Rig but maybe portable. Anyone out there in QRP land know anything about this rig? If you can shed any light on the subject please e-mail direct. This fellow is still in the service is and planning to head back overseas and is thinking about selling the rig. So any info would be very much appreciated!

TIA -

72 es God Bless de Denny AD6EZ<><

Date: Fri, 2 Oct 1998 12:42:58 -0400 (EDT)
From: Paula Bailey <pmbail01@ox.slug.louisville.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [21373] Re: Bugs mating call
Message-ID: <Pine.LNX.3.96.981002123620.20223A-1000000@ox.slug.louisville.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Fri, 2 Oct 1998, Larry B wrote:

> You can always tell a bug by its odd
> mating call. Daaaaaaahditdit dit
> Ac5ez

What's rather funny...

The other day, I was looking through the Jargon File (basically a list of programmer slang and computer jargon) and there is now a lot of evidence to suggest that the etymology (entomology? ;) of the term "bug" as used for software bugs, etc. *probably* ultimately comes from the "bugs" used to send CW.

Basically, "bugs" or semiautomatic keyers came out in the 1800s, during the days of land telegraphy. (Several of 'em had actual carvings of beetles or "click-bugs" on them, hence the term "bug" for a semiauto keyer.) Well, not a whole lot of folks were used to them then, and it was *not* uncommon that one would hear the "mating call" of the "bug" or that one's Morse transmission was totally garbled because of miskeying. And it's *that* which led to "bug" being used as a term for a technical glitch in general, and then later for computers specifcally.

If anyone really wants, I'll gladly repost the relevant bit from the Jargon File. I just found it interesting, though...especially in light of the fact that some things never change. With either kind of bug. :)

-pb

Date: Fri, 02 Oct 1998 11:34:35 -0500
From: Ed Manuel <n5em@flash.net> (by way of Ed Manuel <n5em@flash.net>)
To: qrp-l@lehigh.edu
Subject: [21374] Belton - last call
Message-ID: <3.0.5.32.19981002113435.008e22c0@pop.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

I'm going to Belton on Saturday (tomorrow !). I still have room for two gunners (co-pilots seat is filled). Speak quickly if you want to go.

Leaving at 5am from the Gallera Area, returning around 6pm.

Email me or call me at the office at 713.917.9630.

Ed Manuel, N5EM
Houston, Texas
n5em@amsat.org
n5em@flash.net

Date: Fri, 02 Oct 1998 10:04:29 -0700
From: "Allan (Grant) Taylor" <k7gt@qsl.net>
To: qrp-1@lehigh.edu
Subject: [21375] QRP-level Power Meter
Message-ID: <3615079D.770C@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Before undertaking some power mods on my fleet of little rigs, I would like to acquire a reasonably accurate and yet simple power meter for the range 1 to 10 W. Is there a consensus choice for this requirement?

--
73 de K7GT
Allan Taylor (a.k.a. Grant) Pleasanton CA
email: k7gt@qsl.net
web page: <http://www.qsl.net/k7gt/index.html>

Date: Fri, 2 Oct 1998 18:20:19 +0000
From: "Frank G3YCC" <g3ycc@g3ycc.prestel.co.uk>
To: qrp-1@Lehigh.EDU, gqrp-1@blacksheep.org
Subject: [21376] Web sites
Message-ID: <E0zP8qW-00039b-00@hen.scotland.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-Transfer-Encoding: 7BIT

I found this on my local packet BBS and thought it may be useful.
By the way, I have just received another award for my site...

>From :G4UYI @GB7BMR.#14.GBR.EU
>To :WWW @WWW
>Date/time :29-Sep 08:42
>Message # :50446
>Title :Amatuer Radio Web Sites

Path: !GB7HUL!GB7EYM!GB7ZXN!GB7MSF!GB7BLE!GB7JED!GB7SAN!
R:980929/0842Z @:GB7BMR.#14.GBR.EU #:50685 [Bothe1 Cumbria] FBB7.00f
From: G4UYI@GB7BMR.#14.GBR.EU
To : WWW@WWW

Greetings from Workington; QRA IO84FP
(Western door of the Lake District)

Hello there,

I thought you might be interested in this little lot
below.

It is a list of amatuer radio web sites that I have collected over a
period of time. Some of them may already be well known

--- <http://www.bluu.demon.co.uk> (Winpack Site)

<http://www.innotts.co.uk/~asperges>

<http://www.innots.co.uk/~rur/> (GORUR site)

<http://www.algonet.se/~toruf> (Packet link page)

ftp://ftp.U_net.com/junk/winpack

<http://www.peaksys.demon.co> (Winpack Upgrades)

<http://www.gurney.co.uk/raibc/> (RAIBC site)

<http://www.homeusers.prestel.co.uk/g3ycc/> (Homebrew G-QRP site)

<http://btinternet.com/~g4wif/qrp.htm> (G-QRP Club)

<http://www.duckles.demon.com.uk>

<ftp://ftp.demon.co.uk/pub/winpack>

<http://www.algonet.se/~torulf>

<http://www.traqsoft.demon.co.uk> (Winpack servers @ GM1JLP)

<http://www.users.dircon.co.uk/~Clifton>

<ftp://tapr.org/tapr/SIG/aprssiG/files/INDEX> (APRS)

<http://aprs.rutgers.edu/APRS/>

<http://www.kcaprs.org/homepage.htm>

<http://www.ccnet.com/~rwilkins/aprs.html>

http://world.compuserve.com/homepages/Mike_J_Tyrell (APRS Maps)

<http://web.usna.navy.mil/~bruninga/aprs/html> (APRS author)

<http://freespace.virgin.net/ciemon.d/aprsuk.htm>

<http://www.inside.co.uk/userad.htm> (radio stuff-for sale/swap)

<http://www.wkweb1.cablenet.co.uk/rix/ham/> (Adverts page)

<http://wkweb1.cableinet.co.uk/rix/ham>

<ftp.funet.fi/pub/simtel> (Ham Radio Site)

<http://simtel.net/pub/simtelnet/msdos/hamradio/raft.zip> (Multi Mode Radio decoder)

<http://netcomuk/.co.uk/~kilimax/GM0BRJ.html>

<http://www..prince7.demon.co.uk> (G0NUP homepage)

<http://members.tripod.com/~g6odt/packet.html> (winpack and winpmail)

<http://ultra3.cyberware.co.uk/~ddm76/> (Winpmail)

<http://www2.prestel.co.uk/g7smy>

<http://members.aol.com/ovf17/>

<ftp://ftp.funet.fi/pub/ham/packet/bbs/f6fbb/distrib/>

<HTTP://WWW.GEOCITIES.COM/SOUTHBEACH/COVE/2448/IBIZA2.HTM>

<HTTP://WWW.GEOCITIES.COM/SOUTHBEACH/COVE/2448/PDX.HTM>

<http://wkweb1.cableinet.co.uk/rix/software/html6-50.zip>
(or stop typing after rix for a selection of Ham related software.)

http://www.buck.com/cgi.bin/do_hamcall (Buckmaster Callbook on line directory)

<http://www.ncdxf.org> (Northern Californian DX Foundation)

<http://funnelweb.utcc.utk.edu/~cebik/radio.html> (general radio and

antenna designs)

<http://www.nobarc.com> (North Berkshire (US) ARC)

<http://www.intio.or.jp/jfloz1> (construction notes for a vast array of topics)

<http://www.chilton.com/scripts/radio/R8-receiver> (tune a shortwave transceiver on every SW frequency)

<http://www.d-d-s.nl> (Antenna site)

Date: Fri, 2 Oct 1998 12:24:10 -0500
From: applitech@mcg.net (Claton Cadmus)
To: "QRP-1" <qrp-1@lehigh.edu>, "MNQRP" <mnqrp@qth.net>
Subject: [21377] October Meeting of Minnesota QRP Society
Message-ID: <024a01bdee29\$aaffcebe0\$a10a5e2c@groucho>

The MNQRP Society will hold its October Meeting this Saturday the 3rd at 1:30. All that are in the area are welcome to attend. There will be a program on QRP Digital Communications and making the necessary simple mods to rigs for these modes. Bring your latest and greatest QRP equipment and stories. The meeting is held at the Minnetonka Community Center in Minnetonka, MN a western suburb of the Minneapolis/St. Paul Metro area.

Directions to the Minnetonka Community Center:(Map on the Web Site)

Exit 494 at Minnetonka Blvd. (just south of 394) and go west to Williston Road (less than 1/4 mile) and turn right(north). The Community Center is the first building on your right. Plenty of parking right there. If you need talk in, we will have someone on the 145.45 repeater.

73 de KA0GKC Claton Cadmus
cla@mcg.net
MNQRP #1
Minnesota QRP'ers we're looking for you!
Email me or visit this page <http://www.qsl.net/mnqrp>

Date: Fri, 02 Oct 1998 13:22:41 -0400
From: "Edward A Kwik jr" <eakwikjr@hti.com>
To: "qrp-1@Lehigh.EDU" <qrp-1@Lehigh.EDU>
Subject: [21378] 40 LAST NITE
Message-ID: <36150BE1.4BF4BD59@hti.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Did I experience one of the solar storms last night? At about 2300 UTC I turned on the rig. I checked 10, 15, and 20 meters first. They had my usual S5 to S7 power line noise so I went to 40 where the noise is only S1. At around 7.005 I heard both sides of a 9Y and a HF qso. Wow a HF, Poland! Best dx I have ever heard on 40. He was weak but I could copy (old Triton IV analog, 105ft dipole at 40ft) They had a very casual qso. Not the normal dx quickie. At the end I called the HF but so did a ton of other stateside stations. My five watts was lost in the madness. So I switched to my SW40 Plus and hung out at 7040. Worked three qrp stations, MN, NC, and ME (how about that coverage for fox hunting!). Then around 01:30 things went strange. The band had plenty of signals. All kinds of BC and SSB but very few CW stations. I thought maybe my SW40 was getting overloaded so I switched back to my Ten Tec. Same thing. I checked 10, 15, and 20. Not a single station anywhere! Did we have a visitor last night?

Ed Kwik AB8DF qrp-1# 1444 Waterford MI

Date: Fri, 02 Oct 1998 10:44:23 -0700
From: Terry Conboy <terry.conboy@airtouch.com>
To: qrp-1@Lehigh.EDU
Subject: [21379] QRP Featured at Palo Alto ARA Meeting Oct 2
Message-ID: <199810021740.KAA09352@tnc.AirTouch.COM>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

"QRP Bob" Dyer, KD6VIO will be the featured speaker at the monthly meeting of the Palo Alto Amateur Radio Association on Friday, October 2nd. The meeting starts at 7:30 PM at the Menlo Park Recreation Center, 700 Alma Street, Menlo Park, CA. Everyone is welcome.

You are also invited to join us for the pre-meeting speaker's dinner at 6 p.m. at Su Hong Restaurant, 1039 El Camino Real, Menlo Park.

If you need directions, use the W6APZ 145.23 (-600) repeater (PL 100).

73, Terry

PS - Shameless plug for the PAARA annual Auction and Flea Market, Saturday, November 14th at the American Legion Hall, 651 El Camino Real, Redwood City. Auction starts at 9:30 AM, doors open at 7:30 AM. The auction charges a 10% commission or buy a flea market table for \$10.

--

Terry Conboy <http://www.qsl.net/n6ry> Tel: +1-925-210-3475
N6RY CM97aw terry.conboy@airtouch.com Fax: +1-925-210-3469

Date: Fri, 2 Oct 1998 13:52:01 -0400
From: Martin Squicciarini <MSquicciarini@McGettigan.com>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [21380] Free advice
Message-ID: <428B45F810F5D111A5D80001FA7E6AE36056E2@NT_EXCH_SRV>
MIME-Version: 1.0
Content-Type: text/plain

At our monthly club meeting a salesman from HRO was our presentation for the night. He came with several rigs including the Icom 706, Kenwood 570D, Icom 746(?) and Yeasu ### (one of their top of the line rigs, can't remember which one). He described the features of each radio, the pros and cons but the most important thing that he said last night was before you get a new radio make sure you antenna is the best possible antenna you can put up. It's still true that if you can't hear 'em you can't work 'em. Just my two cents for the day.

73 - Martin Squicciarini NR3Z
m_squicciarini@cbtech.com (work)
msquicciarini@mcgettigan.com (work)
skitch@resuba.com (home)

Date: Fri, 2 Oct 1998 10:56:22 -0700
From: "Radman" <radman@best.com>
To: <k7gt@qsl.net>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [21381] Re: QRP-level Power Meter
Message-ID: <199810021753.KAA21870@proxy3.ba.best.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Content-Transfer-Encoding: 7bit

Hi Grant,

I prefer the Oak Hills WM-2. It's really designed for QRP work with a frequency range of 300 KHz to 54 MHz. Insertion loss seems low. It will measure down to 5mW. Ranges are: 10W, 1W or 100mW with an accuracy of 5% of full scale. Big analog meter makes it easy to read in the lab or field. It's an easy kit :-) \$84 from OHR. URL: <http://www.ohr.com/wattmeter.html>

(not related to OHR... just happy with my WM-2)

GL & let us know what you decide on,

72 - Conrad Weiss - NN6CW

>>>Before undertaking some power mods on my fleet of little rigs, I would like to acquire a reasonably accurate and yet simple power meter for the range 1 to 10 W. Is there a consensus choice for this requirement?

73 de K7GT

Allan Taylor (a.k.a. Grant)

Pleasanton CA <<<

Date: Fri, 02 Oct 1998 13:03:01 -0500
From: Wes Spence <ac5k@ih2000.net>
To: qrp-l@Lehigh.EDU
Subject: [21382] Cheaper PC Board Drill
Message-ID: <36151554.681@ih2000.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Some years ago, I found a cheap drill for use with the small bits for PC board work. It was (I think) called a "tip cleaner" for some sort of welding or cutting equipment. It consists of a small cylinder about the size of a large pen with a bit holder on the end and a removable cap on

the other end to store bits in. It came full of very small bits. Just ask someone at a welder supply house what the proper mname is. It is not motor driven or fancy, but afterall-- isn't this supposed to be QRP.

72, Wes AC5K

Date: Fri, 02 Oct 1998 13:06:26 -0500
From: Wes Spence <ac5k@ih2000.net>
To: qrp-l@Lehigh.EDU
Subject: [21383] Loop antenna feed
Message-ID: <36151622.6C38@ih2000.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I haven't used loops in some years, but when I did I fed them the traditional way in the corner. If you referr to the Low Band DXing book by ON4UN, he suggests feeding them at a point offset from the corner. I have friends that swear by that feed method and tell me that they really notice the difference having fed them both ways. The book goes into the details on the feedpoint. I highly reccomend the ON4UN book. He knows his antennas as anyone who has ever worked his excellent signal will attest to.

72, Wes AC5K

Date: Fri, 2 Oct 1998 11:18:46 -0700
From: gsurrency@juno.com (Gary L Surrency)
To: qrp-l@Lehigh.EDU
Subject: [21384] RE: PCB Drilling (LONG)
Message-ID: <19981002.111846.14526.1.gsurrency@juno.com>

Gang,

Many, many thanks to all that replied to my questions about drilling PCB's. A special thanks goes to Conrad Weiss for his in depth research and interesting report. Looks like I'll have to get some carbide bits and give them a try. Sometimes you will see these at hamfests.

I went out yesterday and bought a drill press stand (Dremel model 212, \$39.99 at the local hobby shop) for my Dremel model 395, since I already

had that little tool.

While I was there, I picked up some tiny drills as well. The hobby shop had some little plastic tubes of drills in the #65 to #80 wire drill size. I bought some #72, #73, and #74 individual drills for \$0.95 each. They are carbon steel, and probably won't last very long, but they have them in stock so I thought I'd give 'em a try. ;-)

Also, there was a tiny drill assortment made by Exacto for \$24.99. It contains individual drills from #61 to #80 in a clear, round, plastic container.

I made the RIT mod PCB from 73 Magazine, December 1995, by author Mike Bryce. After drilling about 30 holes in the PCB, I observed clean, true holes with no detectable wear of the drill bit, and I didn't break any bits. You just need to make sure you etch the center of the pads out to the epoxy material before you drill. This allows the drill to "find home" in the pad so it does not creep. Good light and/or a magnifier should be used to be sure the drill lines up with its intended target.

I decided to use the #73 drill for the resistor, transistor, and IC socket pads. That size is just about right to pass the leads of a 1/4 watt resistor and still produce a minimum amount of gap between the solder pad and the lead. If the holes were plated-thru, a larger hole would be preferred. But I have had some trouble in the past with larger clearances between the lead hole and the pad when trying to solder, so I prefer the smaller clearance now. Most commercial PCB's have larger holes than this, but they are plated-thru. A little larger drill size might be necessary for IC's, since mis-alignment might cause some trouble when inserting the IC or socket.

BTW, the Dremel tool Model 395 is a variable speed device, and it worked quite well in the Dremel drill press stand. It can go from about 15,000 rpm to as much as 30,000. The lower speed seemed to be fine, but after Conrad's post - I may try the higher speeds next time. The moto-tool has ball bearings, so there is much less play in the shaft than your typical drill or drill press. The stand is not the quality of professional equipment, but it has minimal slop in the feed and has an adjustment to take up wear if needed.

It has a 6"x6" aluminum base with a three-point stance on supplied rubber feet so there is no rocking about, and a friction adjustment to set the initial height of the moto-tool. The rack and pinion feed is 3" of travel, and has a depth stop. The material of construction of the rack and pinion housing appears to be made of glass-filled nylon or other plastic, but seems adequate for the small level of force used with small drills. It can also be rotated 90 degrees to hold the Dremel for other purposes than drilling.

The spring tension of the handle at first seems a little strong, but it functioned well when I used it. Dremel used to market a keyless chuck, pn. 4480, that replaced the collet chuck on the moto-tool's shaft, but that has been discontinued in favor of a set of four collets to accomodate different tool shanks, pn. 4485. This arrangement probably has less runout than the chuck would have.

There are two nylon thumb screw-type clamps that surround the housing of the Dremel tool so that it does not move, and this makes for a secure mount.

This seems to be the same setup I used to use to drill PCB's when I used the PCB workshop at Harris Semiconductor a decade ago. We were always making test fixtures for prototype tests of IC's.

I still have to get some more PCB fabrication materials, including some Tinnit to tin plate the copper. Circuit Specialists and DC Electronics has some pretty nice kits in stock if you are interested.

Again, thanks to all that posted their recommendations. It sounds like the small drill press from Jameco might be an acceptable alternative for those that don't already have a Dremel tool. If anyone has one or buys one, please report your opinions.

Dead bug construction is fine for a lot of work, but there is a special sense of satisfaction when you make your own PCB's for your projects. Don't be afraid to give it a try.

72,

Gary Surrency AB7MY QRP-L #571 Chandler, AZ (near Phoenix)

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Fri, 02 Oct 1998 11:44:27 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: pmbail01@ox.slug.louisville.edu
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [21385] Re: Bugs mating call
Message-ID: <36151F0B.A6AFAD3A@rakefet.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Paula Bailey wrote:

>

> The other day, I was looking through the Jargon File (basically a list of
> programmer slang and computer jargon) and there is now a lot of evidence
> to suggest that the etymology (entomology? ;) of the term "bug" as used
> for software bugs, etc. *probably* ultimately comes from the "bugs" used
> to send CW.

Not true. Here's one account (sorry, I can't attribute it):

Rear Admiral Grace Hopper, US Navy (Rtd) (often cited as the world's first professional, paid-for-programming, programmer), began her career on the Naval Ordnance Computer Project at Harvard during World War II. The machine was offically called the Automatic Sequence Controlled Calculator, or ASCC, and contained bank upon bank of relays to act as switches.

More popularly known as the Harvard Mk1, it was devised and run by a martinet, Howard Aiken. He insisted that everything that occurred to his precious machine was entered into a log. One hot afternoon, a fault arose. Grace Hopper traced it to a particular bank of relays, where she found a dead - electrocuted - moth caught between the jaws of one relay.

She took the moth out, stuck it solemnly in the log, wrote the time by the side of it and, underneath, her first claim to immortality - "De-bugging".

Vic, K2VCO

Date: Fri, 2 Oct 1998 14:07:10 -0500
From: n5inz@juno.com (John M Andrews)
To: qrp-l@Lehigh.EDU
Subject: [21386] Re: PCB Drilling (LONG)
Message-ID: <19981002.140711.3358.14.N5INZ@juno.com>

Thanks for a great post on PC drilling, Gary.

Several other little tricks-

The Dremel also is a neat tool for routing and milling. You can cut slots in pc board very well to make boxes that are a precise fit.

Square and rectangular holes for analog and digital meters are a snap. The "free-hand" router will make very smooth round holes for meters and speakers.

A thin, shallow line cut with the small end-mill makes for a cool accent line and can be filled with liquid paper after being painted. A serious(and expensive) toy is the Dymo Electronic Label Maker. About \$50. This makes a film tape to label controls on your project. If you cut the PC board the width of the tape it will give a recessed effect *and* the markings are very hard to touch and wear.

It's a great tool and does much more then drill holes!

72, John- N5INZ- Schertz, Tx

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Fri, 02 Oct 1998 13:54:51 MDT
From: "Jerry McCollom WOMC" <w0mc@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [21387] Update: NC20 10-Turn Pot Group Buy
Message-ID: <19981002195453.26168.qmail@hotmail.com>
Content-Type: text/plain

Hello,

Here's the update I promised where I'll let you know who I have on the list.

Please reply if you thought you were on the list but are not, if I have a wrong quantity down for you, or have some other mistake. When you reply, be sure "group buy" is in the subject somewhere -- that way it automatically goes into my group buy folder and I'll take care of it. Otherwise, it may get lost in the noise.

This is an interest list only and is not a commitment as of yet. Early next week I hope to post the price and where to mail payment (well, I know where you'll mail payment, I just don't want to start accepting any yet :-). I'm shooting for the end of October to get the order placed so

maybe we can get them sent out around the same time as the NC20 kits.

So, apologies in advance for the bandwidth, but on with the list.

Thanks & 72,

de Jerry W0MC
QTH: Fort Collins, Colorado
QRP-L #800

10-Turn Group Buy Interest as of 10/2/98
Ordered by callsign -- Name, Call, Qty

Jerry Terres, AA10F,	1
Dick Schneider, AB0CD,	3
Gary Surrency, AB7MY,	3
Dave Fifield, AD6AY,	5
Al Gritzmacher, AE2T,	1
Sam Billingsley, AE4GX,	3
Walter Dufrain, AG5P,	2
Jim Larsen, AL7FS,	2
Mike Newbold, K0Y0,	1
Steve Elliot, K1EL,	1
Edwin Roswell, K2MGM,	2
Angelo Drammissi, K3YUN,	1
Tom Dooley, K4TJD,	2
Glen Reid, K5FX,	1
Tim Pettibone, K5OI,	1
Marv Fagenson, K6HCJ,	1
Bill Ross, K6MGO,	1

Mike,	K6MW,	1
Allan G. Taylor,	K7GT,	1
Stan,	K7NUU,	2
Kaye,	K8GZ,	1
Steve,	K8IDN,	1
Rod Johnson,	KA7YOU,	2
Terry Bassett,	KA9TXE,	2
Myron China,	KB0LMQ,	2
Don Branflick,	KB2SQT,	2
Jim Francoeur,	KC1FB,	1
Matt Clark,	KC6VSR,	1
Harold,	KC9GL,	3
Mike Stapp,	KE0WW,	2
Mason Meek,	KE6IYU,	1
Bob Painter,	KF6NKH,	1
Bob Cutter,	KI0G,	1
Steve Schroder,	KI0KY,	1
Phil Gage,	KI0NY,	1
TERRY MYERS,	KQ5U,	1
Jim Fielden,	KU4QW,	2
Jim, KW3U,		3
William B. Keane,	N1NIK,	2
Ken Newman,	N2CQ,	1
T.J. "SKIP" AREY,	N2EI,	1

David Maliniak,	N2SMH,	2
Bill Wetherill,	N2WG,	1
Al,	N2ZHS,	1
Lamar Derk,	N3AT,	1
Alan Fryer,	N3BJ,	
Chris Cartwright,	N3XRV,	1
Bill Cotter,	N4ALG,	1
JERRY BROWN,	N4EO,	1
Steve,	N4EUK,	1
John L. Sielke,	N4JS,	1
Brian K. Shiratsuki,	N6SXT,	1
Doug Faunt,	N6TQS,	1
Ralph L Irons,	N7RI,	1
Bruce Prior,	N7RR,	5
John Bohnert,	N9KW,	2
Dave Gauding,	NF0R,	1
John Burnley,	NU0V,	1
Jim Lyons,	VE2KN,	2
Robert W. Shaw,	VE3SUY,	1
Brien Pepperdine,	VE3VAW,	1
Earl Murphy,	VE6EWM,	2
George F Franklin,	W0AV,	1
Jim Rybak,	W0KSD,	1
Jerry McCollom,	W0MC,	2

Hal Bergeson, W0MXY, 1
Mike Rioux, W1USN, 1
Tony Colaguori, W2GUM, 1
Joseph Trombino jr, W2KJ, 1
Gabe Sellers, W2ZGB, 2
Robert P. Okas, W3CD, 1
Paul Helbert, W3VJ, 2
Bob Edwards, W4ED, 2
Sheldon Dunham, W40EL, 1
Rick Sealey, W4SEA, 2
David D. Meacham, W6EMD, 1
Dave, W7AQK, 2
Steve Sorrell, W8SFF, 1
Paul Christensen, W9AC, 1
Rick Weber, W9QZ, 2
Jerry Parker, WA6OWR, 1
Richard H. Neindorff, WB2RAR, 1
Alan A. Wheeler, WB4JJJ, 1
tom whalen, WB5QYT, 1
John, WB6MFS, 1
Larry Cahoon, WD3P, 1
Jeff Greer, WD4ET, 1
Dave Epps, , 2
Ken Hanks, , 2

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Date: Fri, 2 Oct 1998 20:28:01 +0100
From: wd3p@juno.com (Larry Cahoon)
To: qrp-1@Lehigh.EDU
Subject: [21388] Loops
Message-ID: <19981002.202802.4350.0.wd3p@juno.com>

I got back two direct response on my loop ant experience and didn't see either posted, perhaps out of consideration for me, but I think the comments should be of general interest so I'm passing on the relevant parts to the group with tnx to the two helpful individuals. I may have to give it another shot this winter.

>from Dave, KC1DI
your experience was a bad on because of the height above ground.. it needs to be at least 30 feet off before it really starts to play.. here are a few
qso that i worked while i had it up. (unfortunately last years Ice storm took it and it's supports down) , Also your right about the electric fence
wire.. good hamming 73 Dave

>and from Mark, N5WEB
Just in case you have not received a response (I have not yet seen one on the reflector) I think your problem was the use of electric fence wire. This is usually steel wire and it's DC resistance is enough to give you considerable attenuation. I have a friend who a number of years ago was having all kinds of trouble getting quads and slopers to work right until he changed to copper or coperweld wire.

73/72 all de Larry.....WD3P
WAS 21.89 Watts total power
Worked all US Counties with an average power of 55.9 Watts and falling.....

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Date: Fri, 2 Oct 1998 16:58:12 -0400
From: Sam Billingsley <SBillingsley@usaninc.com>
To: "Qrp1_Submit (E-mail)" <qrp-1@Lehigh.EDU>
Subject: [21389] ARRL Radio Designer Info Needed for Common Solid Stae Devices use
d in QRP projects
Message-ID: <21E06269B00ED111BE9B00805F6D0FA33D8F9D@mailserver1.usaninc.com>
MIME-Version: 1.0
Content-Type: text/plain

I've have the ARRL Radio Designer (ARD) v1.5 circuit simulator software package for awhile now and have used it many times for filter design (for my PIXIE) but I am interested in trying to use it for real QRP RF circuits made from real components like 2n222 and common graden variety transistors and FETs. The Manual I have is weak,at best, and gives no info on parameters for specific solid state devices. There are databank directories with the software but they only have a limited number of components. Is there a source for additional info or am I missing something? Any direct response would be appreciated.

Sam Billingsley AE4GX Atlanta, GA

Date: Fri, 02 Oct 1998 14:27:11 -0700
From: W7LS <w7ls@blarg.net>
To: jskalski@buffnet.net
Cc: qrp-1@Lehigh.EDU
Subject: [21390] Re: Drill sizes?
Message-ID: <3615452F.5E15@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

One thing to note on drill sizes: If you go to a pcb house, the plating-through process will put on a variable amount of copper in the holes. Roughly, .003" on the diameter. I just had a board done and it was way more than that. Some houses have a standard rack of 6 or 7 drills. Check with them.

73 de Jim, W7LS

James Skalski wrote:

>
> What are the most popular drill sizes used for pcb fabrication?
> Any pearls here?
>
> 73,
>
> Jim (N2G0)

Date: Fri, 2 Oct 1998 21:29:55 +0100
From: wd3p@juno.com (Larry Cahoon)
To: qrp-l@Lehigh.EDU
Subject: [21391] TS 50s to QRP Levels
Message-ID: <19981002.213225.4350.3.wd3p@juno.com>

I asked about 4 weeks ago about putting the TS 50s at 5 watts. Got a number of replies, and even a "be careful" warning.

Seems that the pot for the 10 watt power setting can be set at 100 Watts rather easily. So I was warned to be careful adjusting it lest I ruin my wattmeter.

The route I took was using a 9 Volt battery and the ALC input for the rig. There is a description of the basic circuit at Bob, N4BP's website.
<http://wg104a.wh.uni-stuttgart.de/~n4bp/>

My version is just a little bit different in that it is used only two pots and a resistor in place of the third pot that Bob uses. The value of the pots does not seem to be critical. It became clear that the most important factor was the voltage across the ALC line. I was hoping to get away with just a set of resistors and perhaps one pot if necessary and to use a couple of AA cells. That was not to be.

The first lesson was that the voltage across the ALC line had to be quite a bit higher than 3 volts to work. This effectively eliminated the possibility of using AA cells.

The second lesson learned was that the setting of the pots and resistor for a given power level was dependent on how fresh the battery was. The first setup was with an older battery that checked out at 9.0 volts. When I replaced it with a fresh battery that checked out at 9.6 volts all the settings for the resistors had to be redone. This made it necessary to put two pots in the circuit instead of the one I had been using.

The power out is a function of both the supply current to the rig. This was important to me as I am intending to use the setup for mobile operations and supply voltage varies depending on if the car engine on or off. The power out also depends on the voltage across the ALC circuit. I did not check to see if current made a difference. I set out to track the effect of the voltage on the power out. I will use that to set the power of the rig. I don't want to carry a wattmeter with me in the car all the time. As it turns out the power level is very sensitive to the input voltage. Nevertheless I can use that voltage to get the power level as long as I duplicate the other settings.

The brief table below shows what happens as the voltage varies. All of the measurements were take with the car engine running and the rig on. It did not make a difference if the rig was keyed or not. The rig power level was set at 10 Watts level. I used that level to protect the Wattmeter. It used a fresh battery, although I don't think that makes much of a difference. All measurements were into a dummy load.

Voltage	Power Out
8.20	5 Watts
8.24	4 Watts
8.28	3 Watts
8.33	2 Watts
8.42	1 Watt
8.53	500 mWatts
8.79	100 mWatts
8.95	50 mWatts
9.16	20 mWatts

Before I started to set up the circuit per Bob diagram I e-mailed Kenwood at the address they give at their website and asked how I could get specifications on how the ALC circuit could be used to turn the TS 50s down to QRP levels. They were not at all helpful. I got back a rather terse message saying that the power levels on the rig could only be controlled via the menu to 10, 50 and 100 watts with not other explanation.

73 de Larry.....WD3P in MD
WAS with total power of 21.89 Watts
Worked all US Counties with an average power of 55.9 watts and
falling.....

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End of QRP-L Digest 1232
